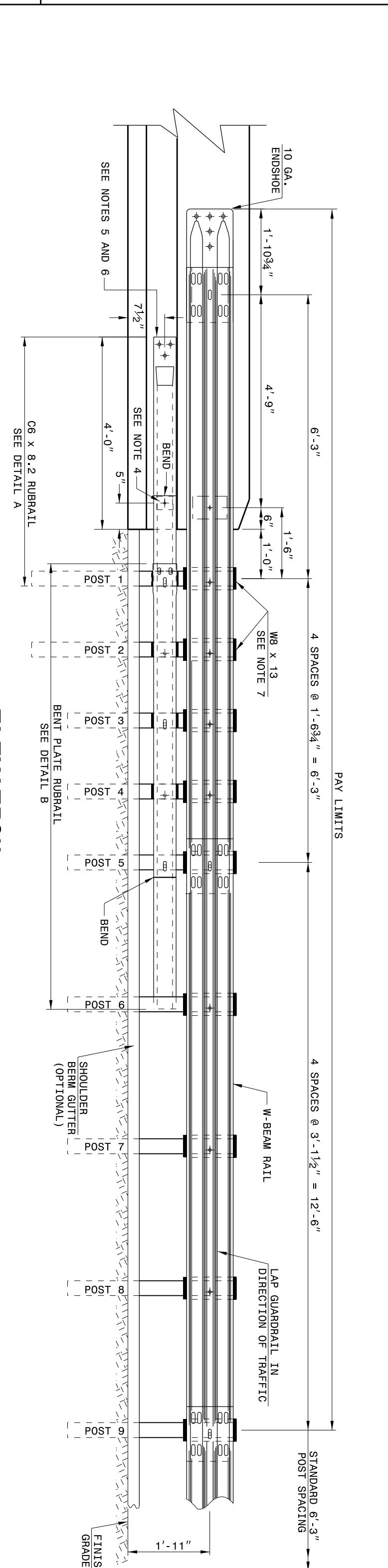
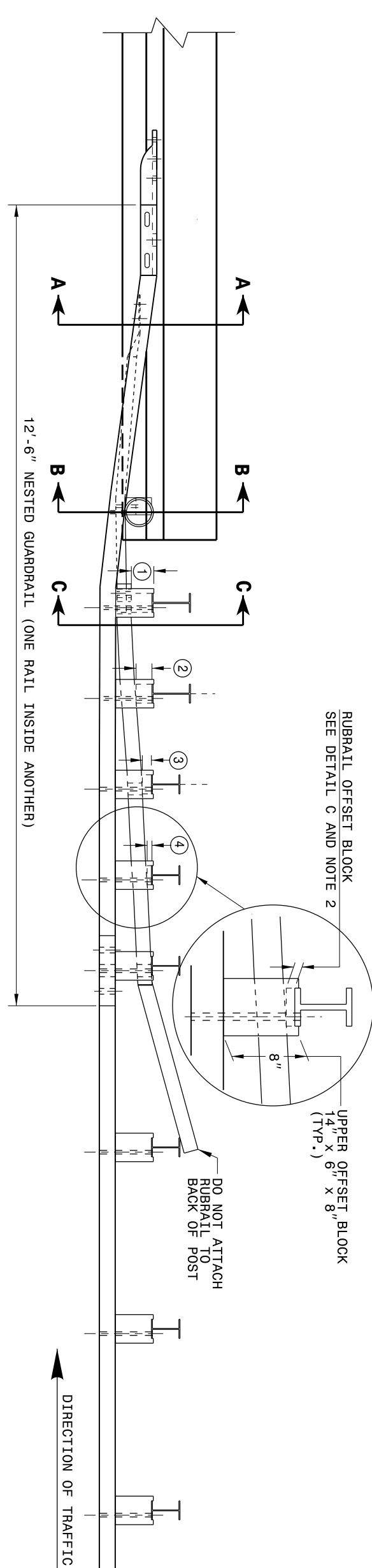


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ELEVATION

- GENERAL NOTES:
- POSTS 1 THROUGH 5 REQUIRE AN ADDITIONAL HOLE TO ATTACH LOWER BLOCKS AND/OR RUBRAIL.
  - RUBRAIL BLOCKS LOCATED ON POSTS 1 THROUGH 4, SECURE RUBRAIL AND BLOCKS TO POSTS 1 AND 3. RUBRAIL IS SECURED TO POST 5 WITH A 5/8" x 4 1/2" BUTTHEAD BOLT. RUBRAIL IS FLARED TO BACK OF POST 6 AND NOT SECURED.
  - STEEL SPACER TUBE IS A SCHEDULE 40 GALVANIZED PIPE 6" INSIDE DIAMETER x 9' LONG. ATTACH TUBE TO GUARDRAIL ONLY WITH 3/4" DIA. BOLTS. DO NOT SLOPE RUBRAIL BLOCKS TO RAIL ELEMENT ONLY. USE 3/8" x 3" LAG BOLT WITH FLAT WASHER.
  - SEE DETAIL A FOR SLOPED RUBRAIL BLOCKS AND ANCHOR UNIT TO RAIL ELEMENT TO BE CONSISTENT WITH THE SLOPED TOE OF THE BARRIER OR BRIDGE RAIL.
  - ANCHORAGE:
    - AT EXISTING BRIDGE RAIL AND NEW OR EXISTING BARRIERS, ANCHOR RUBRAIL USING THREE 5/8" x 6" CHEMICALLY ANCHORED ANCHORS.
    - AT EXISTING BRIDGE RAIL AND NEW OR EXISTING BARRIERS, ANCHOR THE W-BEAM END SHOE USING A 4 BOLT HOLD DOWN PLATE (SEE STD. DWG. 862.004).
    - INSTALL THE W-BEAM END SHOE BEHIND THE NESTED W-BEAM ELEMENTS.
    - AT NEW BRIDGE RAIL, ANCHOR THE W-BEAM END SHOE AND RUBRAIL AS DETAILED ON THE STRUCTURE PLANS.
    - POSTS 1 AND 2 ARE W8 x 13, 7'-6" LONG. ALL OTHER POSTS IN THE ANCHOR UNIT ARE W8 x 8.5.



PLAN

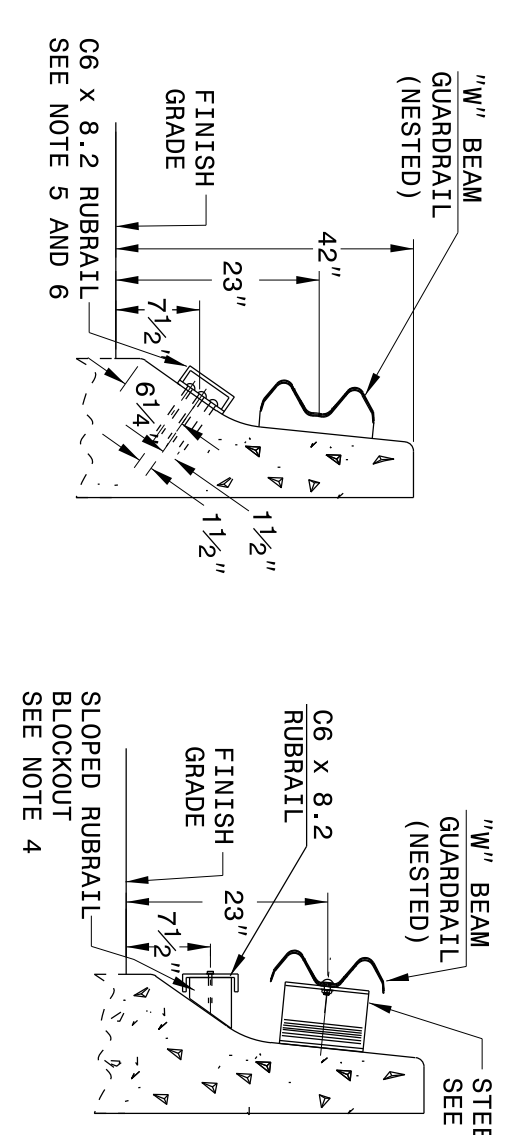
ENGLISH DETAIL DRAWING FOR GUARDRAIL ANCHOR UNIT TYPE B-77 FOR F-SHAPE BARRIER

SHEET 4 OF 7 862D03

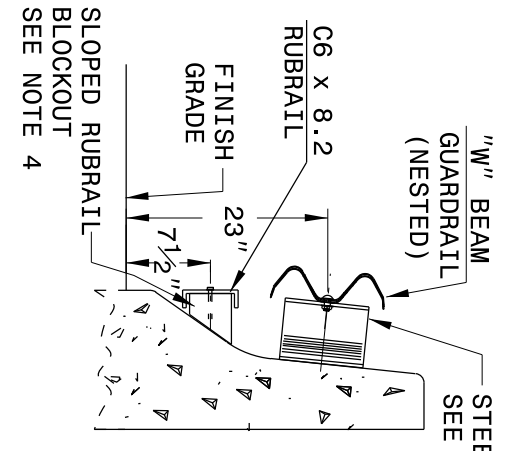
ENGLISH DETAIL DRAWING FOR GUARDRAIL ANCHOR UNIT TYPE B-77 FOR F-SHAPE BARRIER

SHEET 4 OF 7 862D03

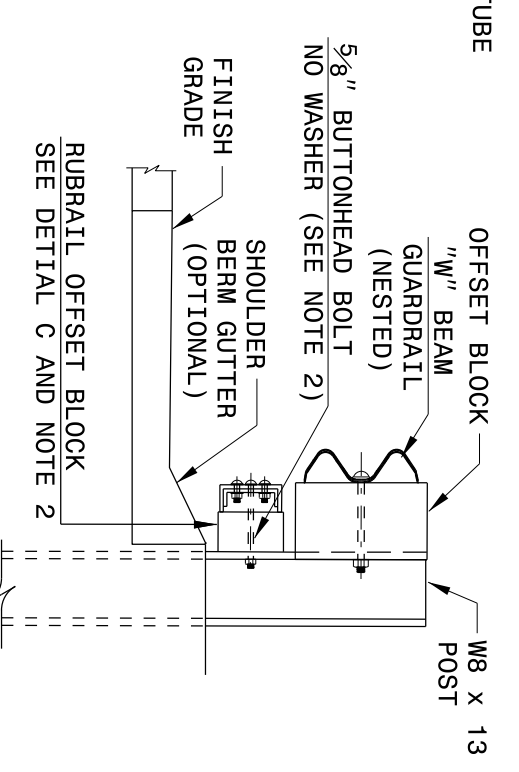
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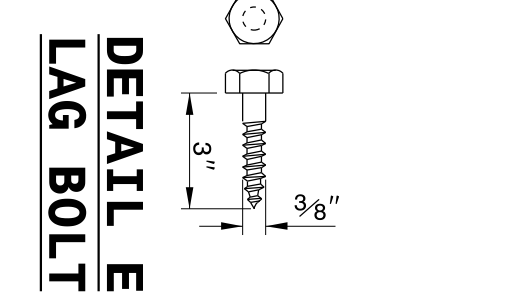
SECTION A-A



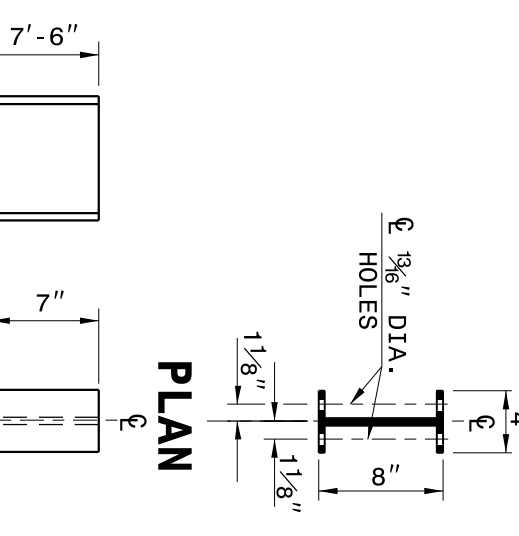
SECTION B-B



SECTION C-C



DETAIL E LAG BOLT

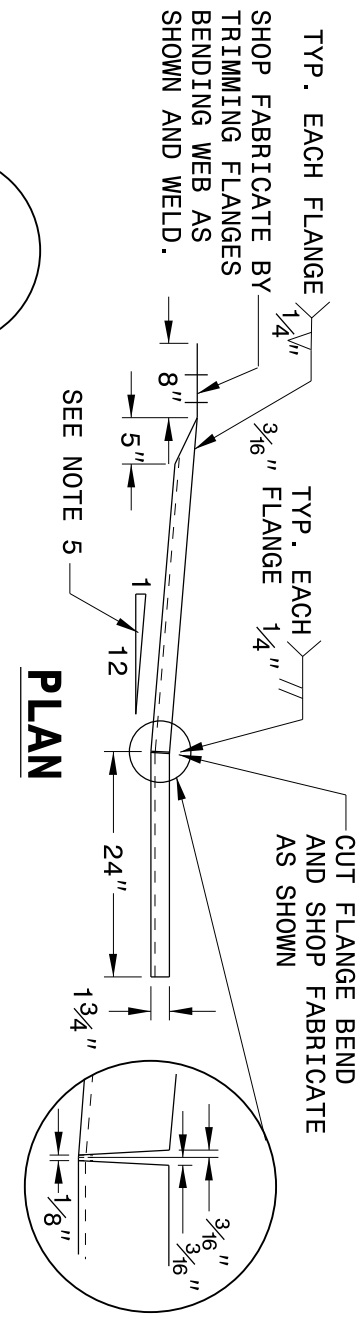


DETAIL F STEEL POST

RUBRAIL BLOCKS 7" HIGH x 4" WIDE	POST	THICKNESS	BOLT LENGTH
1	4 1/4"	9"	
2	3 1/4"	5"	
3	2"	6"	
4	1"	3"	

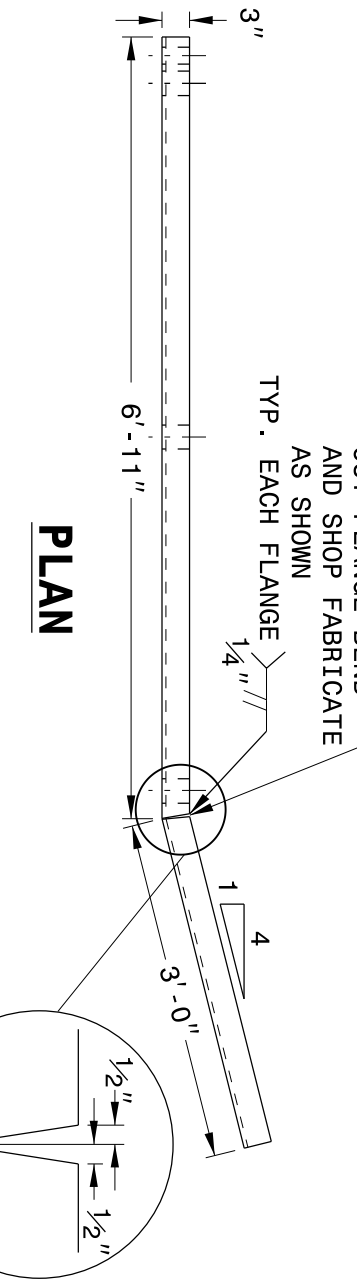
\* BOLTS FOR POSTS 2 AND 4 ARE USED TO ATTACH BLOCK TO POST. RUBRAIL NOT ATTACHED TO BLOCK.

DETAIL C RUBRAIL BLOCKOUT



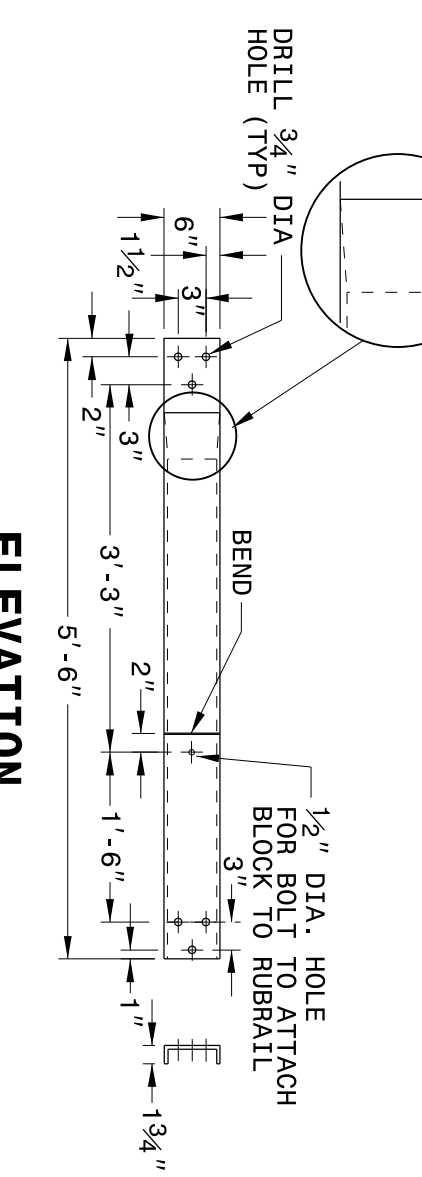
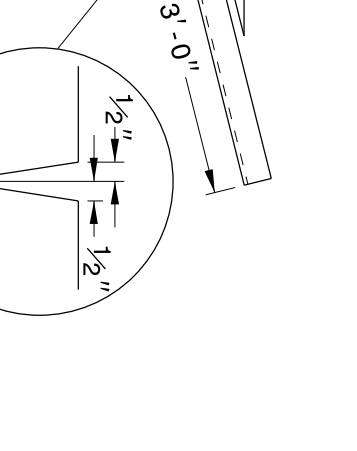
PLAN

DETAIL D SLOPED RUBRAIL BLOCKOUT

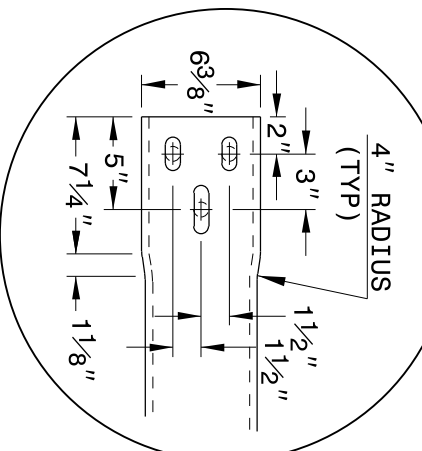


PLAN

DETAIL F STEEL POST W8 X 13 X 7'-6"



ELEVATION DETAIL A C6 X 8.2 RUBRAIL



ELEVATION DETAIL B BENT PLATE RUBRAIL

SHEET 5 OF 7 862D03

ENGLISH DETAIL DRAWING FOR STRUCTURE ANCHOR UNIT FOR F-SHAPE BARRIER

SHEET 5 OF 7 862D03

ENGLISH DETAIL DRAWING FOR STRUCTURE ANCHOR UNIT GUARDRAIL ANCHOR UNIT TYPE B-77 FOR F-SHAPE BARRIER

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CONTRACT STANDARDS AND DEVELOPMENT UNIT Office 919-707-6950 FAX 919-250-4119

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